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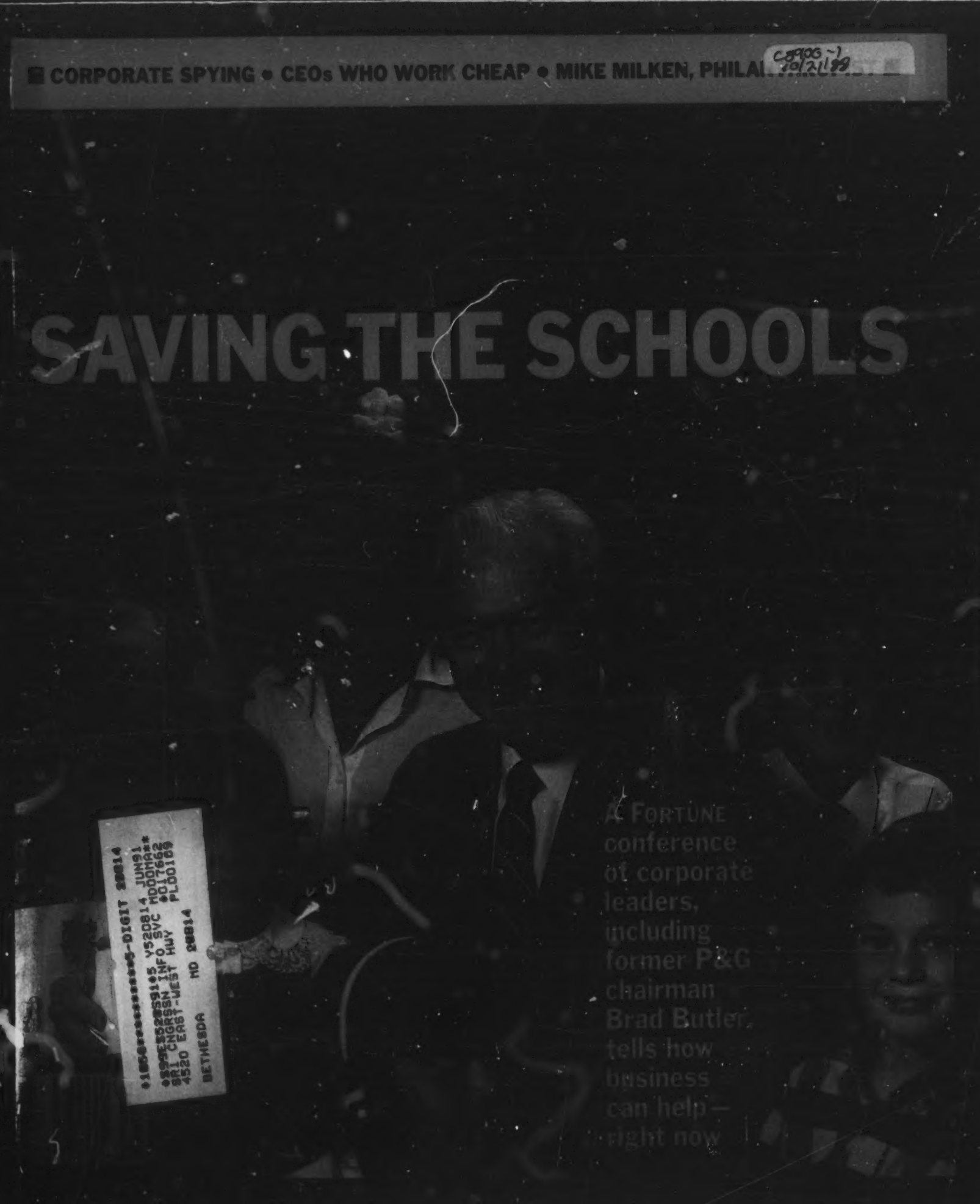
SAVING THE SCHOOLS



A FORTUNE conference of corporate leaders, including former P&G chairman Brad Butler, tells how business can help—right now

NOVEMBER 7, 1988

FORTUNE

JACKSON HILL—SOUTHERN LIGHTS

COVER: Frank Schramm photographed former Procter & Gamble Chairman Brad Butler at the Roselawn Condon School in Cincinnati.

GE is working to triple the number of college-bound youngsters in Lowndes County, Alabama.

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In an age where nations increasingly compete on brainpower, America is producing an army of illiterates. Companies that need skilled workers now realize they must do something to save the public schools. Not to be charitable, not to promote public relations, but to survive. A FORTUNE conference of corporate leaders, educators, and politicians tells what steps business can take now. *by Nancy J. Perry*

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"The only motive Michael Milken has in operating these charitable foundations is public-spiritedness."

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"If you drop a dead cat off a tall enough building, he's going to bounce."

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"As always, we found a mix of pie-in-the-sky budgets and unpolished jewels."

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"All I got was an armored car and a pay cut."

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EDITOR'S DESK

P&G's Pepper and former chairman Brad Butler at FORTUNE's Education Summit

LET'S STOP lamenting the crisis in America's schools and start doing something about it. With that in mind, FORTUNE in late September convened a conference of 106 leaders of business, government, labor, and academe to discuss exactly what business can—and should—do. The drive to improve education is uniting corporate chiefs to a degree that no social issue has before. At our two-day Education Summit in Washington, D.C., Procter & Gamble President John Pepper traded ideas with Ford Chairman Don Petersen and American Express President Lou Gerstner, among many others. Former Secretary of Education William Bennett, a critic of teachers' unions, found himself in rare agreement with American Federation of Teachers President Albert Shanker. Both said that what the schools need is not small changes but more like a "revolution."

Writer Perry addresses a session.

Our cover story, beginning on page 42, highlights the most promising proposals, plus lessons that GE, Ashland Oil, and other companies have learned in trying to upgrade schools in regions where they hire. The project was supervised by editors Ann Morrison, a onetime Head Start assistant teacher, and Susan Fraker, who once helped aspiring journalists as a Vista volunteer. Associate editor Nancy Perry, who wrote the story, was educated in the public schools of Dallas and planned to be a teacher before she eventually chose journalism.

Lucky for us. Ever since Perry wrote "The Education Crisis: What Business Can Do" (FORTUNE, July 4), she has been invited to speak about the subject in many parts of the country. In the tiny eastern Pennsylvania town of Morrisville, for example, superintendent Jim McDowelle recruited Perry to talk to the school board, which confronted its own crisis—an $866,000 deficit that taxpayers refused to help finance. As he reported, "Before Nancy spoke, there was a lot of finger-pointing in the community. She told us about other school districts with similar problems, and that helped us focus on ours in a nonparochial way." Today the Morrisville school board is united and may merge its district with an adjoining one. In the meantime, it has secured a ten-year loan.

Answers don't come easily, but FORTUNE can at least provide insight and advice. We hope "Saving the Schools" is a valuable step in the process.

Marshall Loeb
MANAGING EDITOR

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Faxing by credit card at the Sofitel Hotel in Redwood, California

night delivery services. **Fax-plus**, for example, charges $8 for ten minutes, plus the long-distance telephone fee.

About 600 machines have been installed so far. **Northwest Airlines** put 13 of them at U.S. airports, including Boston's Logan and Chicago's O'Hare, and one at London's Gatwick.

By the end of the year, **United Air Lines** plans to install 12 units in its Red Carpet Club lounges around the country. Bill McCue, who publishes a directory of public fax stations, estimates that by the end of 1991, fax freaks will find about 2,000 charge-it machines in the U.S. alone. – **Carrie Gottlieb**

GRAND MET'S GRAND DESIGN

■ Even as the directors of **Pillsbury** were studying the $5.2 billion takeover bid from Britain's **Grand Metropolitan**, Phyllis Martin, whose husband Ian heads Grand Met's U.S. operations, was reading the official guide to happenings in Minnesota. Pillsbury is based in Minneapolis, which is where Martin hopes to move Grand Met's worldwide food division headquarters.

Mrs. Martin's confidence—if not equanimity, since it would be her 16th move in 25 years—isn't necessarily shared on Wall Street. Some financial analysts say the bid is essentially a done deal; others, that another European company will step in and raise the ante. But all agree that Pillsbury will change hands. "It's way too late for a restructuring," says an investment banker.

Martin explains Grand Met's bid as a continuation of Chairman Allen Sheppard's strategy to build a global empire of food, drink, and retailing businesses using high-profile brand names. Grand Met has sold companies that don't fit the plan, among them **Inter-Continental Hotels** to Japan's **Seibu Saison Group** for $2.3 billion just four days before the Pillsbury grab.

Such well-known Pillsbury names as Burger King and Green Giant would suit Grand Met just fine. "No pun intended," says Martin, "but the company is a sleeping giant."

Ian Martin and his top brands

Burger King, the perennial also-ran to **McDonald's**, is in for a special wake-up call from Martin, a droll Scotsman, one-time ITT executive, and former head of Grand Met's brewing division. He says the chain's past marketing campaigns have been off the beam. Martin also is likely to make big changes at Pillsbury's headquarters. Nine months after Martin took over at Inter-Continental, 33% of the corporate staff was gone.

European bankers love Grand Met. They rushed to lend the cash for the Pillsbury deal. If that bid fails—"We don't pay silly prices for anything," says Martin—Grand Met will probably buy something else. – **Colin Leinster**

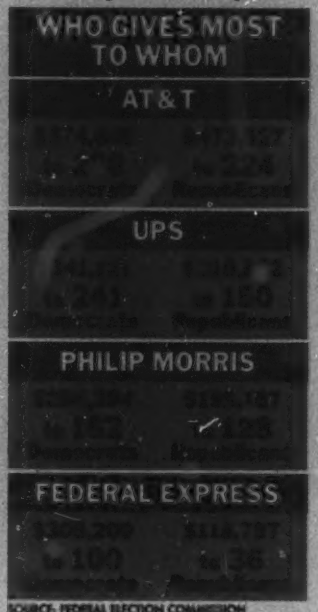
PRAGMATIC PACS PREFER INCUMBENTS

■ What labor is to Democrats, big business is to Republicans, right? Not when it comes to money. Corporate America is backing Democrats over Republicans in November's Senate and House elections. Pragmatism says it all: Most politicians who want to be reelected are, and most of the Congressmen who are running again this year are Democrats. It never hurts to have friends in high places.

AT&T is the biggest giver among corporate political action committees (see table). Its beneficiaries include two of the most powerful Democrats on Capitol Hill: vice presidential candidate Senator Lloyd Bentsen and House Speaker Jim Wright. These two Texans got $10,000 each from AT&T.

United Parcel Service gives *only* to incumbents, among them Glenn Anderson, a California Democrat, who got $7,000. He chairs the House Public Works and Transportation Committee.

Critics of PAC power stem from all points of the political spectrum. Says David Staton, manager of political action programs at the conservative U.S. Chamber of Commerce: "Some corporations are just interested in doing a deal with whoever's in there." Adds Susan Manes, vice president for issue development at liberal Common Cause, a citizens' group: "The House of Representatives is becoming the House of Lords; the Senate, a millionaires' club." – **F.H.K.**



SOURCE: FEDERAL ELECTION COMMISSION

STEVE JOBS: WHAT'S NEXT?

■ "I'm a little nervous," confessed Steven P. Jobs to a packed San Francisco symphony hall where he unveiled his new computer. The powerful,

BY VIVIAN BROWNSTEIN

SLOW BUT STEADY GLOBAL GROWTH WILL KEEP THE GOOD TIMES ROLLING

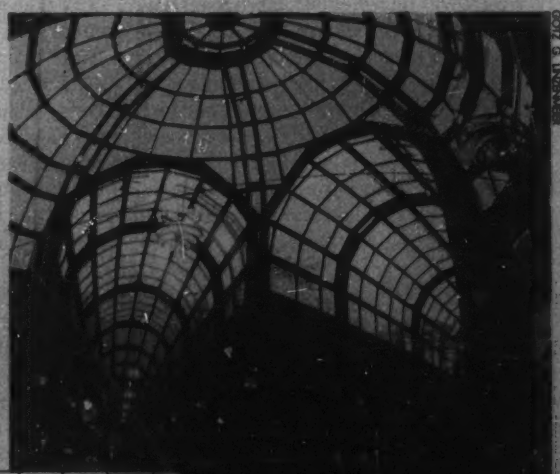
OVERVIEW

- **The U.S. will regain the export market share it lost during the 1980s—and more.**
- **Inflation will pick up in most major industrial countries.**
- **Governments will try to hold the dollar fairly stable.**

■ It's chicken-and-egg time. Economic growth in the U.S. will drop from 3.9% this year to 2.5% in 1989, and it will fall as well in other industrial countries. A major reason for the U.S. slowdown is that exports will expand less rapidly. But why will foreign economies be less dynamic? You guessed it: The U.S. won't buy as much from abroad. Don't ask which comes first. But even with slower growth, the increasingly interdependent economies of the industrial world should have a tolerable year.

Keep in mind that the U.S. is still far and away the biggest market for the rest of the world's output as well as its own. Americans bought 16.5% of last year's $2.5 trillion global import total, almost twice as much as any other country. Though most American businesses can make money selling to the home market alone, companies in other industrial countries don't have that luxury. By next year the U.S. will have regained all the share of the world export market it lost while the dollar was soaring, and more. Yet only 11% of its real GNP will be generated by exports. West Germany, by contrast, relies on exports for more than one-third of its GNP.

For all its weight in the world economy, the U.S. is highly vulnerable these days to what happens abroad. August's trade deficit, which jumped to $12.6 billion from $9.5 billion the month before, is a pointed reminder of that foreign connection. U.S. economic policies for years to come will be shaped by the continuing large deficit, the growing foreign debt that must be serviced, and the painful memories of the dislocations that businesses suffered over the past several years. The Federal Reserve, for example, must try to keep the dollar on an even keel—if it moves too low, inflation will worsen; too high and U.S. exporters suffer. That means the Fed could have a hard time countering weakness in the economy or leaning against rising inflation. And the intractable federal budget deficit leaves little room for fiscal policy to fight any slowdown in growth. The U.S. won't get pneumonia if the rest of the world catches a bad cold, but it could suffer an uncomfortable sneezing spell.



COURTESY LENSMAN

HEADING UPWARD EVERYWHERE

West Germany's inflation is rising, along with everyone else's. But it hasn't slowed these shoppers, taking a breather in a Hamburg mall.

SOURCES: IMF FOR GERMANY AND JAPAN; FORTUNE FORECAST FOR U.S.

Inflation poses the worst risk to world economic health. FORTUNE believes that U.S. prices will rise by 5.7% in 1989, compared with less than 4.5% this year. And we have no argument with the International Monetary Fund's latest projections, which indicate faster-rising prices in West Germany and Japan as well (see chart). The rates themselves aren't overly rambunctious; the threat is that one or more countries will go too far in attempting to keep inflation down. Every economist has a recession scenario that starts with prices accelerating, follows with monetary authorities clamping down on money growth and raising interest rates, and ends with the economy braking too abruptly.

The scenario could most easily develop in West Germany, where fervid inflation fears date back six decades. Germany's central bank, the Bundesbank, continues to maintain restrictive monetary conditions; it

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FORTUNE's forecast is produced by this magazine's economists using our own economic model.

has increased interest rates several times in recent months. Domestic demand is sluggish, and most observers expect GNP growth to sink below 2% next year from about 3% in 1988. Still, German authorities will continue to resist American pressure to stimulate, says Mieczyslaw Karczmar, Deutsche Bank's New York economic adviser. Their contention: Businesses don't want to hire because the country's rigid labor laws make it so difficult to fire. Thus, any attempts to bolster the economy would not reduce unemployment but would just lead to more inflation.

JAPAN, too, is responding to inflation worries. Experts differ in their forecasts for the country: The IMF expects a slowdown in growth from this year's 5.8% to 4.2% in 1989, along with an increase in inflation from 1.1% to 1.6%. Bill Belchere, director of international forecasting services for the WEFA consulting firm, thinks growth may dip below 4% and inflation will rise to 2%. Belchere points out that capacity utilization is already extremely high, and labor markets are very tight.

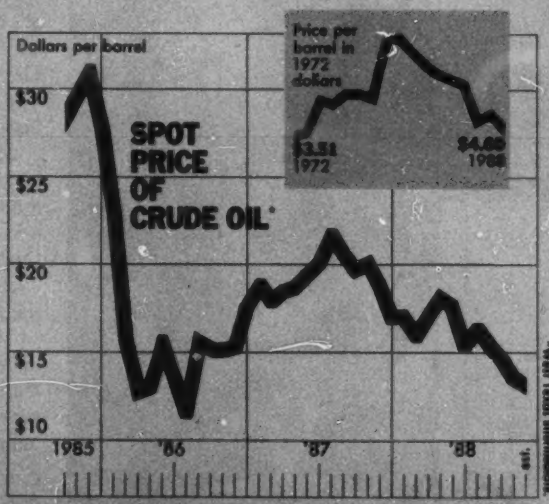
Japan's policymakers are taking measured steps, says Jeremy Hale, senior international economist of the Goldman Sachs investment firm. Monetary authorities are urging banks to "voluntarily"—as in voluntary auto quotas—restrain lending. They have also raised short-term interest rates. But unlike the Germans, the Japanese have some solutions in mind that could help world growth. The central bank, the Bank of Japan, is urging the government to encourage imports by relaxing regulations as one way of holding down inflation. That kind of thinking is just what the rest of the world's exporters like to hear.

For the time being, the Bank of Japan is setting aside worry that Japanese demand could eventually claim so much of the world's capacity that higher inflation would erupt everywhere, especially among the newly industrialized countries. For example, the bank estimates that a 5% rise in Japanese imports is enough to boost Korean real GNP by 1%. This could put quite a lot of pressure on the NICs' production capacity. Ranjan Pal, the WEFA group's resident NIC expert, says increases in domestic consumption are already catching up with the growth of output in Taiwan and Korea. One happy consequence for exporters elsewhere, says Pal, is that these countries will be more apt to open their doors to imports.

SLOWDOWN IN THE INDUSTRIAL WORLD

	GROWTH IN REAL GNP 1988	1989
Japan	5.8%	4.2%
Canada	4.3%	3.2%
Britain	4.0%	2.5%
United States	3.9%	2.5%
Italy	3.0%	2.4%
France	2.9%	2.4%
West Germany	2.9%	1.9%

Lower oil prices could take some heat off the inflation outlook in many countries. As the chart shows, the latest drop is really a continuation of a trend that began more than a year ago. By mid-October the price of West Texas intermediate, a crude oil regularly traded in the spot market, had fallen to $13.50 per barrel from the recent peak of $21.59 in July of last year. The gradual decline is in sharp contrast to the collapse nearly three years ago. And the effect could be more beneficial, especially for the U.S. economy. Other countries, such as Japan, would not gain as much relative to the U.S. this time. During the past couple of years Japan had the double benefit of oil priced lower in dollars even as the dollar was falling against the yen—a big reason Japanese companies could hold the line on export prices long after the dollar peaked in early 1985. This time the dollar is not likely to decline so much.



SLIDING DOWN A GENTLER SLOPE
Oil's year-long decline has been far less dramatic than the 1985-86 collapse. Though well below its peak, oil still costs one-third more in real terms than in 1972.

In the immediate future oil prices could go either way. Saudi Arabia could force crude oil down to $5 per barrel if its fellow OPEC members don't get production back into line with agreed quotas. But the response would likely be swift, and the price would soon return to at least today's level. Looking out a few years, an average close to the OPEC marker price of $18 per barrel seems likely. It's high enough to generate satisfactory revenues for the Persian Gulf producers, but low enough to dampen U.S. exploration efforts. In real terms today's oil prices are not especially cheap: Based on pre–oil shock 1972 prices, a barrel that cost $3.51 then would cost $4.60 now. At $18, oil would give producers a 90% premium over real 1972 prices for their depleting resource.

Prospects for the dollar's holding relatively stable in the year ahead look good. It will be buffeted by trade developments and by America's progress, or lack of it, on tackling the budget deficit. But the major countries of the world now appear to agree that stability is desirable—even at the price of some internal grumbling. German industrialists, for example, want the dollar to strengthen against the mark to enhance their international competitiveness, while the Bundesbank is plumping for the reverse, hoping to hold down inflation. Japanese businesses would also like a stronger dollar. But Jeremy Hale thinks that the central bank would prefer a moderate and steady yen appreciation, though it won't say so openly because it does not want to take a chance of sending the dollar into a tailspin before the U.S. election.

After six years of expansion, the world economic outlook remains surprisingly good. Things could go wrong—for example, inflationary pressures might worsen quickly in the U.S. if the dollar plunges and in Europe and Japan if oil prices bounce back sharply. For now, plan on a year of slower but solid growth. ■

AMERICAN BOSSES ARE OVERPAID . . .

. . . Or their counterparts in Europe are underpaid. However you argue it, the gap is too huge to last. Big bonuses and stock options are hopping the Atlantic. ■ *by Shawn Tully*

FROM EUROPE to the Orient, top managers are strikingly underpaid compared with their U.S. counterparts. Chief executives of 24 U.S. companies, including Du Pont, Sara Lee, Toys "R" Us, and Lotus Development, earned $5 million or more last year, counting bonuses and profits from the exercise of stock options. Some 300 CEOs earned at least $1 million. Second bananas did pretty well too. More than 100 assorted vice chairmen, chief operating officers, and executive vice presidents took home total compensation that topped the $1 million mark.

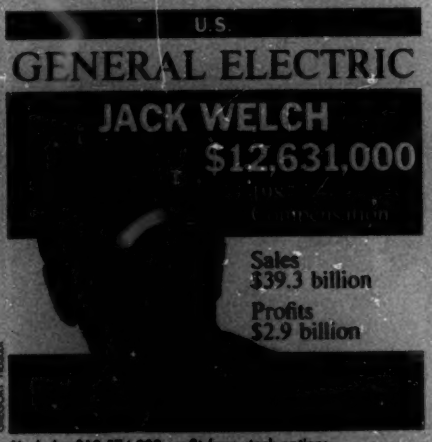
Million-dollar-a-year packages for any executive are about as common in Europe and Asia as Cadillac stretch limousines. A. Daniel Meiland, a Dane who heads the North American offices of executive search firm Egon Zehnder, figures that no more than 30 chief executives of large European companies earned that much in 1987. The number in Asia is probably even smaller (see box).

The vast difference between the U.S. and the rest of the world has persisted despite the marked appreciation of many currencies against the dollar. It stems from deeply rooted differences in history, culture, and government policies. You could argue, as many critics do, that Americans make too much. Whether that is so or not, the disparities have grown so great that some adjustment is due. Since U.S. chief executives are unlikely to cut their own pay, look for Europe, if not Asia, to catch up fast.

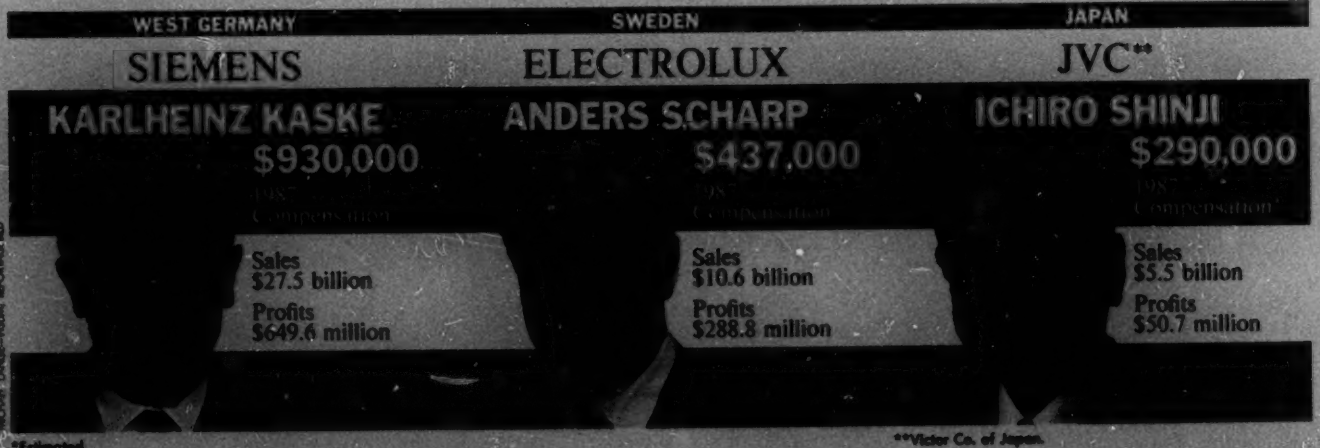
Among Europeans the Germans have gained the most ground so far. The average pay for heads of West Germany's five largest industrial companies—among them automaker Volkswagen and electronics producer Siemens—was $1 million (vs. $2.8 million for the top five in the U.S.). Though a few Britons, mainly in financial services, have soared into American salary ranges, the average for the largest British companies was $500,000. In France chief executives of the dozen largest companies, a group that includes automaker Renault and industrial gases producer Air Liquide, earned an average of $400,000.

Most striking is how poorly paid are Europe's superstars, managers who have helped shape some of the world's best companies and made billions of dollars for shareholders. Anders Scharp, who has turned Sweden's Electrolux into the world's largest appliance maker, with $10.6 billion in sales last year, had total compensation of just $437,000. Jack Welch at General Electric was paid $2.1 million in salary and bonuses and exercised $10.6 million of stock options. Sir Peter Walters has guided British Petroleum's transformation in this decade from a stodgy state-owned company into a nimble private producer. Yet Walters earned just $582,000 last year, small change alongside Exxon Chairman

REPORTER ASSOCIATES *Jonas Bernard Blank, Aimery Dunlap Smith*



*Includes $10,574,000 profit from stock options.



*Estimated.

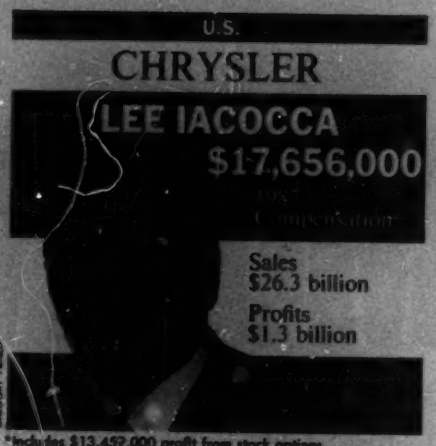
**Victor Co. of Japan.

Lawrence Rawl's total compensation of $5.5 million.

Europe's Lee Iacocca—in performance, not pay—is Jacques Calvet, president of French automaker Peugeot. Since 1984, Calvet has steered Peugeot from near bankruptcy to robust profits, boosting the company's market value more than ten times, to nearly $5 billion. Yet Calvet, who works in a small office and locks his phone to prevent unauthorized calls, earned about $250,000 in 1987. That is less than 2% of Iacocca's average compensation of $16 million annually for the past three years, including proceeds from stock options. A pretty good bargain. (Iacocca did, however, work for $1 in 1979, the year Chrysler negotiated its bailout by the government.)

WHY ARE pay packages so much lower in Europe than in the U.S.? The explanation begins with the way executives are paid in different countries. The bonuses, stock options, and other types of variable compensation that propel U.S. paychecks into the millions are far less lavish in Europe. American compensation packages typically have three main elements: base salary, a bonus based on the most recent year's performance, and long-term compensation, ranging from stock options to cash payments based on the company's results over three to five years. In a study of the 100 largest U.S. companies, the consulting firm Towers Perrin Forster & Crosby found that chief executives' pay averaged over $1.5 million. Of that, only $600,000 came from salary; the one-year bonus and long-term compensation added $940,000.

A shift in Europe toward U.S.-style compensation should prove a key trend in the next several years. Stock options, non-existent just four years ago, are catching on fast. Says Arthur Bierwirth, an international compensation specialist with Towers Perrin in New York: "The increase in variable compensation could make hundreds of European executives very wealthy in the 1990s."



*Includes $13,459,000 profit from stock options.

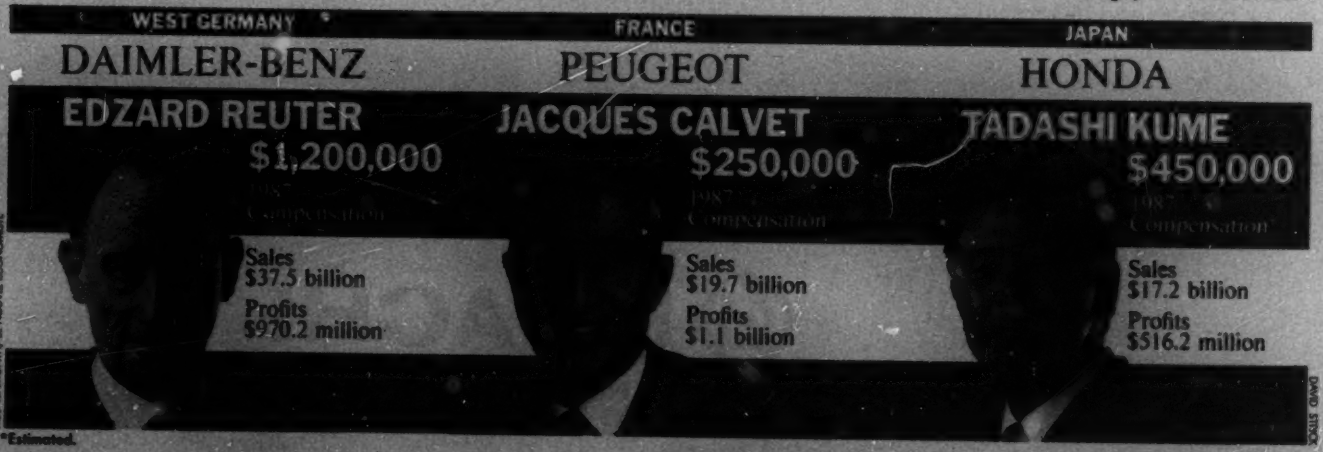
Spurred by the European Economic Community's drive to remove all barriers to trade by 1992, companies are starting to treat Europe as a unified market, not just for products but for managers as well. Competition for top talent is heating up. Says Robert Mosley of Hay Management Consultants in London: "Today in Europe you have to pay well to attract the best." Executive search has become a growth industry. Companies that once promoted mainly from within now raid competitors for chief executives or senior managers.

Many European executives so far have seemed less interested in money than their American counterparts. Says Victor Dial, an American who heads sales for Peugeot and was formerly a top executive with Ford of France: "In Europe the greed factor is lower than in the U.S." Loïk Le Floch-Prigent, who led France's state-owned chemical giant Rhône-Poulenc to a spectacular recovery, is a prime example. Jovial and hirsute, Le Floch-Prigent lives in a spartan apartment complex in a working-class neighborhood on the outskirts of Paris. He drives a Renault 5, basic transportation for recent college grads.

As chief executive from 1982 to 1986, Le Floch-Prigent, 45, earned about $150,000 a year. He got no stock options, bonuses, or golden handshakes. Now he is a leading candidate for the top job at France's biggest company, state-run oil producer Elf-Aquitaine—where he expects to earn another lean paycheck. To Le Floch-Prigent, that's okay: "Some people want to make money and show it off. I want to create."

Culture plays a role. Europeans generally consider displaying wealth—and sometimes even accumulating it—to be gauche. Says Erik van Galen, an executive search consultant for Boyden International in Paris: "A Frenchman would much rather show off the Renoir he inherited than say he makes $1 million a year." Typically the future captains of French industry graduate from the Ecole Polytechnique and the Ecole Nationale d'Administration, prestigious training grounds for public service, then spend at least a decade working for the government. At age 35 or 40, when they leave the ministry of industry or finance to take a top industrial job, their new salaries seem like a fortune compared with puny government wages.

In the 1970s British managers were not overly concerned with making money for themselves—or sometimes even for their companies. Says Don Young, personnel director at British electronics company Thorn EMI: "The old guys were more con-



*Estimated.

cerned with belonging to the right clubs and having separate executive lavatories."

It's not that Europeans can live more cheaply than Americans. A two-bedroom apartment in a chic Paris neighborhood sells for $600,000, and lunch for two at the restaurant Laurent near the Champs Elysées runs $250. A three-bedroom house in the Frankfurt suburbs costs $650,000. Though personal income taxes have come down a bit, they are still far higher than in the U.S. The top marginal rate is more than 80% in Sweden, 57% in France, and 40% in Britain. In addition, value-added taxes on consumer products range from 38% in Italy to 12% in Spain.

American executives assume that their European counterparts make up for lower pay with fancy perquisites, and to an extent they're right. According to a Towers Perrin study, perks add from 4% to 13% to compensation in most European countries, compared with 2% in the U.S. Jan Carlzon, the president of Scandinavian Airlines System, earns around $400,000 a year and also gets the use of a luxurious suburban villa near Stockholm owned by the company. Corporate cars frequently come with the top jobs. Kent Price, chief executive of Chloride Group, a British battery producer, drives a $45,000 company-owned Daimler 3.6. Still, that era may be ending. Though companies are not taking perks away, neither are they creating new ones. And many governments have begun taxing fringe benefits. Italy, among other countries, has closed the loopholes for company housing, insurance, and free travel for spouses.

The relatively high pay in West Germany stems mostly from a boom in bonuses. Stock options are effectively banned be-

WHY ASIAN CHIEF EXECUTIVES GET SUCH SMALL SALARIES

Like many Japanese companies, Toray Industries, the country's biggest maker of synthetic fibers, was hurt by the strengthening yen. The $6-billion-a-year company saw its domestic market eroded by Asian competitors. Then last year the company turned around dramatically, with much of the credit going to Katsunosuke Maeda, 57, a career Toray manager who became president in mid-1987. Credit, that is, in the form of a pat on the back. Maeda, who preached globalization and diversification, was paid just $240,000 last year, including bonus.

That's just about average for all Japanese companies. Maeda's counterparts in South Korea make $80,000 to $130,000 a year, according to Towers Perrin Forster & Crosby, the U.S. consulting firm specializing in executive pay. The average for a top executive in Taiwan is $55,000, and in Singapore, $165,000.

Unlike Europe, Japan seems unlikely to change its basic pay system anytime soon. Japanese executives are almost always home-grown managers rather than hotshots brought in to turn around a flagging enterprise. Teamwork is the ideal, though of a special kind. A spokesman at a major steelmaker describes it this way: The Japanese top executive is "sitting on *mikoshi*," the ornate palanquins carried during traditional festivals. "The managers underneath," he says, "are doing the hoisting."

The Japanese chief executive's job includes setting an example and demonstrating that management has more than self-interest in mind. When the steel industry went into decline, top executives quickly cut their own pay. In return for loyalty, Japanese managers get a benefit: They need not fear for their jobs.

The wage gap between ranks tends to be incremental—by rule of thumb a Japanese chief executive's pay comes to about ten times that of a new recruit. In the U.S., top salaries can exceed 100 times the pay of an entry-level position.

In South Korea the wage gap is greater than in Japan even though executive pay is less, because workers' pay is so much lower. Gerald Williams, Towers Perrin's general manager for northeast Asia, estimates that Korean executives make 15 to 25 times the average national wage. Years of service are more important than quality of service in determining pay for younger employees. Performance becomes more important for managers over 35. One big exception: Koreans are handsomely rewarded if they have worked or studied abroad and have acquired technical expertise that cannot yet be found at home.

There are no hotshots brought in to turn around a flagging Japanese enterprise.

Income taxes tend to discourage high salaries. Marginal rates run as high as 70% in South Korea and 76% in Japan. Tak Niida, director of business development at Cambridge Hewitt International, a management consulting firm in Tokyo, notes that if a company raises an executive's salary, "the money goes to the tax officers, not to the manager." Thomas Nevins, managing director of the headhunting firm TMT Inc., tells of a Japanese executive hired away from a domestic corporation to head the Tokyo branch of a European outfit. Because of taxes, the man opted for a seat on the board of directors rather than an extra $150,000 per year.

Expense accounts, houses, cars with drivers, and memberships at prestigious golf clubs are ways around the tax man, especially in Japan. So is the lump sum paid at retirement. Tax deductions increase with length of service, to reward dedicated employees.

In freewheeling Hong Kong, the pay structure is more fluid. Big performance-based bonuses are common. Headhunters and compensation experts say chief executives can earn as much as $750,000 a year when business booms. Then there are the perks: club memberships, a car and driver to get around the pocket-size British colony, and a fine house—usually complete with servants—overlooking the bustling harbor.

Stock options or other forms of deferred compensation, however, are not popular. Says Robert Muschewske, regional managing director for Hay Management Consultants: "The attitude is, 'I want the money now.' " Hong Kong reverts to the People's Republic of China in nine years, and nobody is taking the long view.

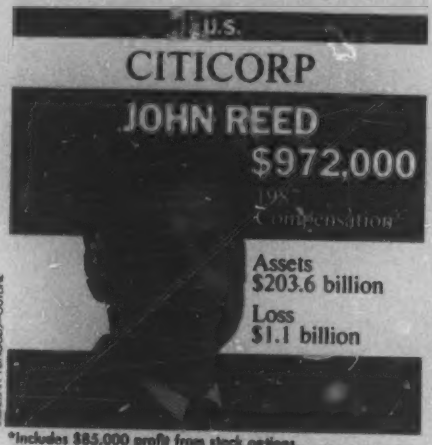
– Sally Solo

cause of onerous tax laws. While bonuses at the big manufacturers and banks seldom exceed 40% of salary, aggressive companies in such businesses as publishing and retailing are jacking up the limits. At Bertelsmann, the $4.7-billion-a-year publishing house, top executives can earn up to 60% of their salary in bonuses. Last year a fat bonus helped lift the compensation of Bertelsmann's chief executive, Mark Wössner, to around $1.7 million.

A pay revolution is shaking Britain. Prime Minister Margaret Thatcher's bracing brand of capitalism brought not just tax cuts and high profits but also a profound change in public attitudes. Big pay packages are no longer frowned upon. High-paid executives have been transformed from robber barons to folk heroes. Says Young of Thorn EMI: "The new managers simply want to perform well and be rewarded for it. They aren't ashamed of what they earn."

American-style bonus plans tied to performance are proliferating. At Woolworth, a onetime British subsidiary of the American retailer that is now independent, Chief Executive Geoffrey Mulcahy should receive an estimated $510,000 on top of his salary of some $340,000, assuming the company's profits live up to projections. Mulcahy's contract awards him 1.5% of base pay for every $1.7 million in operating profit the company makes over $94 million.

Britain's biggest bonus winner is Christopher Heath, 42, managing director of Baring Securities, a London firm that sells Japanese stocks to European clients. Heath's base salary comes to just $220,000, with bonuses tied to how well he performs. In Heath's case the performance has been nothing short of sorcerous. He has multiplied net earnings some 25 times in four years, to $50 million. The surge in profits produced a bonus of almost $4 million in 1986, or 18 times his salary. Last year, according to one estimate, Heath's compensation soared to over $6 million.



*Includes $85,000 profit from stock options.

When the news of this bounty broke, dozens of TV and newspaper reporters camped out in front of Heath's Kensington home—for he was judged to be Britain's highest-paid boss and was therefore an instant celebrity. The tone of the coverage demonstrated how much attitudes have changed in the past decade. Heath was portrayed as a laudable entrepreneur, not as some kind of Ebenezer Scrooge. Because he thought the attention would be good for his firm, he even posed for photographers at home while petting his dog. Britons have learned, though, that performance-based bonuses cut two ways. When Cable & Wireless's earnings dropped this year, so did Sir Eric Sharp's pay. The chairman earned $350,000, down 19% from the previous year.

Along with fat bonuses, Britain has begun offering that other ticket to fortune—stock options. Rights to buy shares on a future date at a fixed price, usually the price prevailing when they are granted, options can be fabulously lucrative if the share price rises sharply by the time they can be exercised. Thanks to new tax breaks, the granting of options took off in 1985, but since they must be held at least three years, few have been exercised so far. When the big cash-out comes, executives should reap handsome gains. On average, stock options granted in 1985 are now worth 120% to 150% of an executive's annual salary.

FRANCE is about where Britain was a few years ago. Nationalized companies are notoriously tight. With a salary of about $150,000, Air France's newly appointed president, Bernard Attali, earns less than many of the line's pilots. Nor are private-sector companies always more generous. Automaker Peugeot and tire manufacturer Michelin are both controlled by families who don't believe in bonuses or options.

The heads of the big French banks—Société Générale and Crédit Lyonnais, for example—often earn less than the men running the French subsidiaries of Bankers Trust, Citibank, or other U.S. competitors. Says Eduardo de Martino, managing partner in France of H.R.C. Wyatt Co., a U.S. compensation specialist: "By global standards, French bankers are way underpaid."

In time a surge in stock options in France should change this picture radically. Options appeal to French conservatives and Socialists alike. Even though he admits to little interest in money himself, Le Floch-Prigent, the former chief of Rhône-Poulenc and a Socialist Party member, says: "It is essential for the employees to profit from their company's good performance." Stock options are potentially more lucrative in France than in Britain and the

*Estimated.

**Société Générale de Belgique.
†Elected CEO September 1988

U.S. Companies can effectively grant unlimited amounts of options to buy shares five years hence at a price 20% below today's. The gains are virtually tax-free.

Among companies that have recently launched stock option plans are electronics manufacturer Matra, luxury-goods producer Moët Hennessy Louis Vuitton, and weapons maker Thomson-CSF. The scheme at Thomson covers more than 150 managers. They receive options to buy stock worth several times their salaries, or more than $1 million in shares for top executives. Says Pierre Roussel, Thomson's director of human resources: "Since last year stock options have made compensation in France far more alluring."

Compensation packages across Europe should keep growing—and keep growing more alike—as cross-border bidding for talented executives intensifies. The City of London is packed with Americans earning Wall Street salaries. Drug and cosmetic company Beecham Group came up with a mouthwatering deal in 1986 to lure Robert Bauman from the U.S. electronics maker Textron to become its chief executive. Bauman's annual earnings now top $1.2 million. This year Beecham raided U.S. competitor Sterling Drug to recruit James Andress as head of its worldwide pharmaceutical business.

In a cross-border bank raid, Société Générale de Belgique, the Belgian holding company recently acquired by French bank Cie Financière de Suez, went to London for a new president. It recruited Hervé de Carmoy from a top post at Midland Bank. Carmoy reportedly got a pay package worth some $1.3 million, stunning for a banker in Continental Europe. That put him ahead of Citicorp's John Reed, whose pay sagged in 1987 along with his bank's performance. Because Citicorp had a $1.1 billion loss for the year, Reed and other top executives got no bonuses at all. Reed earned $887,000. He also got $85,000 for exercising stock options. Before Carmoy gets too excited, though, he should take note of what else Citicorp gave Reed. During the year Reed was granted a total of 85,000 restricted shares of Citicorp stock. Based on recent stock prices, the shares have a value of about $2 million.

Companies that do not match the world scale on compensation face two kinds of problems. If they are headquartered in historically low-paying countries and stick with local pay standards, their best managers may set sail for places like the U.S., where pay is higher. In addition, executives from these companies who work abroad may earn more than their superiors back home. The man who runs British Petroleum's American subsidiary, for example, makes $1 million a year, about 40% more than BP's chairman, Sir Peter Walters.

THESE PROBLEMS have driven a handful of European companies to match compensation with competitors anywhere in the world. Hanson PLC, the British conglomerate with holdings ranging from chemicals and hot dogs to bricks and tobacco (see Dealmakers), is a prime example. With over half its sales in the U.S., Hanson is staffed with executives adept at managing on both sides of the Atlantic. Two years ago the company was on the verge of losing managers to higher-paying American competitors. Says vice chairman Martin Taylor: "Our people in Britain were being approached. To keep them from being tempted away, we moved to a global pay scale." Hanson raised salaries sharply for more than a half dozen top executives. British Petroleum is gradually raising its meager pay scales to be more in line with the world oil industry. It is boosting salaries for top executives, has sweetened its stock option plan, and has substantially increased the maximum bonus.

As these changes take hold, returning home isn't quite the sacrifice it used to be for European executives who have worked in America. In 1980 Pasquale Pistorio—then the $170,000-a-year head of the international semiconductor division at Motorola in Phoenix—returned to his native Italy, where he was moved down to a $135,000 salary to rescue state-owned semiconductor producer SGS. "All I got was an armored car and a pay cut," says Pistorio. But when SGS and the semiconductor subsidiary of France's Thomson-CSF merged last year to form SGS-Thomson, Europe's second-largest chipmaker behind Philips, Pistorio got a raise. The owners, Thomson and the Italian government, decided that Pistorio should be paid closer to international standards. Last year his pay increased to more than $200,000, a figure that should grow if the company implements a bonus plan it has been considering.

Pistorio deserves the money. Descended from a line of Sicilian farmers, he works from 8 A.M. to 9 P.M. and has taken one week's vacation in two years—at a hotel in Sicily adjacent to one of his plants. "In Europe," he says, "we still don't have the same crazy spending for executives as in the U.S." Europe may never hit U.S. heights. But for the first time it is rewarding the mixture of vision and talent, guts and sweat that makes a great manager. F

*Includes $4,257,000 profit from stock options.

**Estimated.

BRINGING BIOTECH DOWN TO EARTH

Suddenly the hot companies that make wonder drugs face formidable competition in the race from research lab to market. They had better learn to make pills. ■ *by Gene Bylinsky*

WALL STREET is sending a persistent message to its one-time favorites, the health biotech companies: You don't have the kind of future you thought you had. Some of you figured you would turn into the next $1 billion giants, but now the going will be lots tougher and you will have to get a lot smarter. Prudential-Bache reports that biotech stocks have underperformed the market by about 30% in the past three months. Genentech, the favorite of favorites, fresh from first-year sales of $180 million in its anti–heart attack drug, t-PA, has seen its stock sag from a lofty $51.75 before t-PA to around $17.

The sudden lack of investor interest puzzles many biotech leaders. While conceding that t-PA sales have slowed—indeed, the company has suspended production—Genentech CEO Robert A. Swanson still insists: "Biotechnology is one of the most exciting technologies in the world today. It is young and it is growing rapidly."

One who isn't puzzled, however, is George B. Rathmann, chairman of Amgen Inc. He sees beyond the two hot drugs Amgen has in the making to a daunting challenge ahead—finding a lasting niche in the business. The game is changing rapidly just as the major pharmaceutical houses, passive in the field until recently, are charging in and threatening their smaller competitors.

Rathmann and other close observers of the industry think biotech companies must translate their exotic discoveries into medicines that can be mass marketed as pills rather than, as has heretofore been the case, administered only as injections. In doing so they must wed their technology with the old-line pharmaceutical industry's art of making synthetic chemicals. And they must do it without losing all their markets to those companies.

REPORTER ASSOCIATES *Alicia Hills Moore, Kate Ballen*

THOMAS NOLAN '88

Flanked by fermenters, Amgen CEO Rathmann waits for FDA approval of his new drug, EPO.

The industry is a long way from meeting that challenge. Biotech companies have cloned some of the most obviously useful molecules—insulin, growth hormone, t-PA, and Amgen's potential blockbuster drug for treating chronic anemia, erythropoietin (EPO), which awaits imminent FDA approval. Coming up with the next round of exclusive molecules will be tougher. Human biochemistry is proving more complex than some scientists thought, frustrating efforts to develop useful products. Patent battles threaten some biotech companies. Most important, the infant industry lacks the research breadth, financing, and experience of the major pharmaceutical producers needed to merge synthetic chemistry with genetic engineering.

Genetic engineering sprang from scientists' discovery of the structure of DNA

(deoxyribonucleic acid), the molecule that controls heredity. By inserting a gene responsible for producing a specific protein, such as insulin, in bacteria or animal cells, the companies have mass-produced these substances and sold them as medications. On an even more basic level, by studying the interaction of molecules in the body, biotechnology has shed new light on disease and how the body fights it.

SYNTHETIC chemistry, on the other hand, uses a Tinkertoy approach to constructing molecules. Scientists try out the new substances in lab dishes or on animals to test their activity against diseases. Putting the two sciences together involves improving the production of synthetic material by using the insights that biotech provides about the properties of certain molecules.

The size of the molecules is important. Molecules produced through genetic engineering are large, just as naturally occurring ones are large, and can't be administered to patients orally because they won't get through the stomach walls and other filtering organs. They must be injected directly into the bloodstream by doctors or nurses, vastly reducing the size of the potential market. Synthetic molecules, which are less complex, can be made much smaller.

Big pharmaceutical producers already have plunged more deeply into linking biotech with the pill business than is generally recognized. Rathmann calls this the "biggest black cloud" on the small companies' horizon. For years the giants have been tapping into the skills of biotech outfits by concluding research and marketing agreements that usually favored the large corporations but allowed the small fry to survive. The big companies have been convinced that if they waited for biotech to mature, they would be able to avoid some research expense and still step in to reap the rewards.

"There's a phenomenal amount of R&D in the biotech field occurring at the big companies that you don't hear about on the outside," says Robert Kupor, who analyzes the industry for the Seattle investment firm Cable House & Ragen. "Biotech companies can't hope to match that."

One of the pioneers among the major drug producers is Eli Lilly. It has built a biotech staff of 500 in Indianapolis. In addition, it has expanded Hybritech, a company it acquired in 1986, into a 1,400-employee enterprise, putting it in a league with Genentech, which employs 1,800. Says Lilly research vice president Irving S. Johnson: "We're about to enter a golden age of drug development. We come with a broader understanding of biology and medicine than the young biotech companies. We're more apt to be thinking in strategic terms." He believes that the survivors among the biotech companies will be those that go beyond just cloning to produce drugs and use that technology to develop medicines with broader uses.

The biotech companies, in some respects to their credit, are more research oriented than market driven. Genentech, for instance, for many years pursued, without much success, an elusive substance called tumor necrosis factor (TNF) as a possible anticancer agent. But TNF appears to have deleterious effects in the body in some situations. It is, for instance, one of the substances released in rheumatoid arthritis that destroys tissue in the joints. The big

IT'S TOUGH TO SUCCEED WITHOUT PRODUCTS

COMPANY	REVENUES latest four quarters in millions	NET INCOME in millions	MAJOR DRUG AREAS	R&D SPENDING in millions	STOCK PRICE RANGE last 12 months	RECENT PRICE P/E multiple*
Genentech	$308.1	$63.1	Diabetes, growth deficiency, cancer, AIDS, heart attack	$111.3	$16.125–$51.25	$16.75 23
Cetus	$64.1	–$22.6	Cancer, AIDS, hepatitis B vaccine	$51.2	$8.50–$22.875	$10.25 N.A.
Centocor	$62.7	$3.6	Cancer, blood clots, septic shock	$31.6	$17.00–$36.50	$21.25 69
Amgen	$60.2	$1.5	Anemia, cancer, hepatitis B vaccine, wounds, infections	$41.8	$16.00–$36.25	$31.125 346
Genetics Institute	$29.2	–$10.5	Anemia, hemophilia, cancer, infection	$36.3	$13.75–$31.25	$15.375 N.A.
Chiron	$24.4	–$11.8	Wounds, burns, bone growth, AIDS, hepatitis B vaccine	$29.7	$8.75–$25.00	$17.50 N.A.
Immunex	$19.7	$2.1	Cancer, infectious disease, wounds, rheumatoid arthritis	$11.0	$9.375–$21.75	$13.125 53
Biogen	$19.7	–$12.2	Cancer, AIDS, tissue and joint inflammation	$22.3	$3.75–$9.625	$8.00 N.A.
Integrated Genetics	$14.0	–$3.3	Anemia, hepatitis B vaccine, heart attack	$13.5	$3.375–$10.75	$3.875 N.A.
California Biotechnology	$13.3	–$10.3	Cardiovascular disease, drug delivery	$15.8	$4.75–$10.75	$5.375 N.A.

*Multiple based on earnings in latest four quarters, exclusive of nonrecurring items.

Many of these health biotech companies hope to emerge soon as full-fledged pharmaceutical firms. With the exception of Genentech, however, all of them derive revenues mainly from research contracts and bank interest, not sales.

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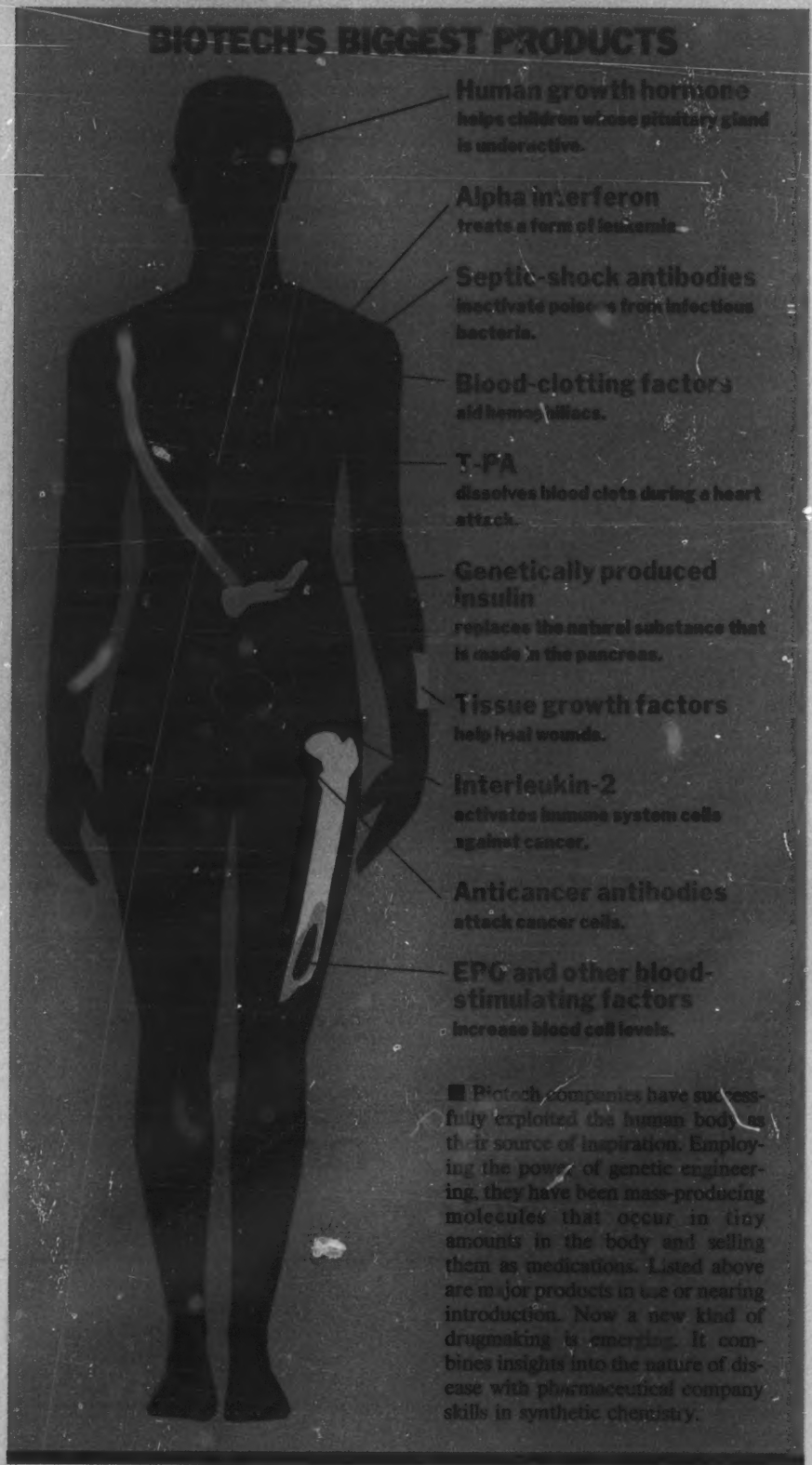
ILLUSTRATIONS BY STEVE JENKINS


BIOTECH'S BIGGEST PRODUCTS
Human growth hormone
helps children whose pituitary gland is underactive.
Alpha interferon
treats a form of leukemia.
Septic-shock antibodies
inactivate poisons from infectious bacteria.
Blood-clotting factors
aid hemophiliacs.
T-PA
dissolves blood clots during a heart attack.
Genetically produced insulin
replaces the natural substance that is made in the pancreas.
Tissue growth factors
help heal wounds.
Interleukin-2
activates immune system cells against cancer.
Anticancer antibodies
attack cancer cells.
EPO and other blood-stimulating factors
increase blood cell levels.
Biotech companies have successfully exploited the human body as their source of inspiration. Employing the power of genetic engineering, they have been mass-producing molecules that occur in tiny amounts in the body and selling them as medications. Listed above are major products in use or nearing introduction. Now a new kind of drugmaking is emerging. It combines insights into the nature of disease with pharmaceutical company skills in synthetic chemistry.

companies are directing their TNF research toward blocking production of the substance during the disease. Success might lead to an antiarthritis pill with huge market potential.

Only a few biotech companies have so far recognized the importance of the fusion of genetic engineering and synthetic chemistry and taken steps to capitalize on it. In a joint venture with Kodak, Immunex of Seattle plans to use the findings of molecular biology to design synthetic molecules that either mimic a desirable activity in the body or block a damaging one. For example, Immunex is seeking ways to employ genetic engineering to mass-produce part of a synthesized molecule that prevents damage caused by arthritis.

Chiron of Emeryville, California, has just started a five-year collaborative drug-design program with Warner-Lambert. The two companies will share their respective skills to develop a new generation of anticancer and central nervous system drugs. This marks Warner-Lambert's entry into biotech. Chiron President Edward E. Penhoet says: "This combination of skills for a focused drug-discovery program represents a model for future partnerships between leading pharmaceutical companies and leading biotechnology companies. It signals a new stage in pharmaceutical development, even more promising than basic recombinant biotechnology."

BIG MARKETS aside, the health biotech companies remain on the cutting edge of molecular biology as it applies to the human body. And industry leaders are still optimistic that their research into the basic causes of disease will produce products and profits. Genentech may yet realize as much as $250 million a year in sales of t-PA, despite competition from other products. That's not bad except in comparison with the $1 billion some security analysts were once predicting, with no discouragement from the company.

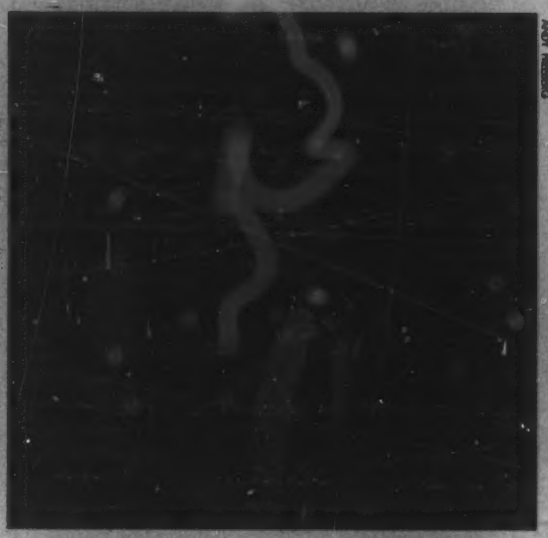
The table on page 160, however, shows how far even the leaders have to go to gain real presence in the market. Of the top ten in revenues, only Genentech is selling products in volume. The rest still derive most of their revenue from R&D contracts with big companies and interest on money raised by going public and still in the bank. The chart on this page defines some of the most promising products and their uses in treating patients. As vital as they may be in

curing or preventing disease, many of these products could prove to have more humanitarian than financial value—at least in relation to the grandiose expectations some investors have had for them.

PRODUCT announcements have slowed considerably in the past two years. The main problem is that science is taking longer than most people expected to work through the maddening complexities of the processes and molecular interaction within the human body. At first scientists thought, for instance, that there was just one interferon molecule that the body produces to battle infection. Now they have counted 19, with striking variations among them. To compound the mystery, each molecule can have a number of activities within the body, some good and some bad. David Botstein, Genentech's vice president for science, frets about such molecules: "We can make them, but their use isn't obvious."

At present, in addition to t-PA, Genentech is selling more than $100 million a year of human growth hormone and collects royalties from licensing the production and marketing of insulin and a type of interferon. Products under development include Relaxin, which eases childbirth; one of the many types of interferon; and a number of still secret possibilities. None of these appears to hold the volume potential of t-PA, and none is expected on the market for three or four years.

Rathmann of Amgen believes his company may be the only one to introduce two big drugs in the next two or three years. One is the chronic anemia drug EPO, which stimulates red blood cell production and could produce sales of up to $100 million in its first year. The other, which is in an earlier development stage, stimulates production of white cells and has shown promise in allowing cancer patients to withstand higher than normal doses of conventional chemotherapy. Amgen's stock reflects these prospects. After falling from $36 to $16 in the market break last year, the price has rebounded to hold in the $30-to-$32 range.



ANDY RESSING

Centocor's Schoemaker wants to buy a bigger company.

In terms of pure discovery, the small biotech companies continue to be formidable. Their size makes it easier to move faster. Cetus, the 17-year-old industry graybeard, still has no significant products on the market, though it hopes to have an anticancer agent by 1990. But Cetus scientists have come up with a more precise technique for locating foreign molecules such as the AIDS virus and traces of cancer. The technology will be sold in joint ventures with Kodak and Perkin-Elmer.

Another area in which small companies have pioneered is monoclonal antibodies. These proteins are produced by the body to fight infection. What sets them apart is their specificity in seeking out targets. Improving on nature, companies such as Centocor and Xoma are rushing to market monoclonal antibodies designed to combat septic shock, a sometimes fatal infection acquired in hospitals. The antibodies inactivate toxic molecules released by the infectious bacteria.

Even when biotech companies develop a marketable product, however, another hurdle often faces them: patent litigation. Amgen and Genetics Institute, another public company, are suing each other over EPO. Amgen has the patent on producing the molecule; Genetics Institute has the patent for first isolating it. Several companies are contesting the rights to Interleukin-2, a cancer fighter.

Such uncertainty is sure to drive some companies into the arms of bigger, older competitors. Hubert J.P. Schoemaker, the ebullient chairman of Centocor, would like to turn the expected acquisition game around. "People on Wall Street tell us that small fish can eat big fish," he says. Others bank on staying independent by finding an unusual niche in the crowded pharmaceutical industry. Richard Casey, president of California Biotechnology, has a strategy of delivering biotech proteins in novel ways, such as insulin through a nasal spray. Eventually, Casey thinks, this strategy will pay off. The big payoff will be for those companies that accept the new competitive reality and combine the exotic with a little of the mundane.

GEORGE STEINMETZ

Cal Bio's Casey thinks novel drug-delivery techniques will help his company find a niche.